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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,349	07/23/2003	Andrew Olcott	02103-551001 / AABOSW19	9132
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/626,349	Applicant(s) OLCOTT ET AL.	
	Examiner TAMMY PHAM	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 1-18 and 47-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 December 2007 has been entered.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 21 December 2007 and on 28 January 2008. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Amendment

3. Claims 1-18, 47-55 have been withdrawn. Claims 19-46 are considered below.

Response to Arguments

4. Applicant's arguments filed 21 December 2007 have been fully considered but they are not persuasive.

5. **In regards to independent claims 39, 46**, Applicant submits that due to the amendments which recites of "*a first control... [and] a second control that is different from*

the first control and has two degrees of freedom..." that these claims are now patentable (Remarks 11). Examiner respectfully disagrees. Although the amended claim language does bring clarity to the main inventive aspects of the Applicant's apparatus, Levin still reads upon the claim language as analyzed further below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 19-31, 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levin et al. (U.S. Patent No.: 6,154,201).

7. **In regards to independent claim 19**, Levin teaches of a system (*Fig. 1, item 10*) for accepting user input comprising:

8. a first control (*Fig. 1, first knob of items 18*) configured to select a source (*Fig. 2, where the source consists of one of items 46-51, column 7, lines 32-35*) in response to an actuation of the first control (*Fig. 1, first knob of items 18*) by a user;

9. a second control (*Fig. 1, second knob of items 18*), that is different from the first control (*Fig. 1, first knob of items 18*) and has two degrees of freedom (*push and rotate as explained in column 8, lines 5-10*) the second control (*Fig. 1, second knob of items 18*) configured to choose a mode (*Fig. 2, selected value as shown from items 42, column 8, lines 5-9*) from a set of modes (*Fig. 2, range of values listed as shown from items 42, column 8,*

lines 5-9) for the selected source (Fig. 2, where the source consists of one of items 46-51, column 7, lines 32-35) in response to an actuation of the first degree of freedom (push to select icon as describe in column 7, lines 30-35; column 8, lines 5-10) of the second control (Fig. 1, second knob of items 18) by the user, wherein actuation of the second degree of freedom (rotate to select desired value as described in column 8, lines 5-10) by the user identifies (where the selected content item or mode or desired value is shown on the display, Fig. 2, column 7, lines 27-30) a content item selection (Fig. 2, value selected through items 46); and

10. a display (Fig. 1, item 14, column 5, lines 13-18 and in Fig. 2) for displaying one of the source (Fig. 2, where the source consists of one of items 46-51, column 7, lines 32-35), mode the content item (Fig. 2, range of values listed as shown from items 42, column 8, lines 5-9).

11. Levin fails to specify that the controllers are able to select a media source.

12. Examiner takes official notice that it is well known in the art to utilize the user input system of Levin to control media sources.

13. It would have been obvious to one with ordinary skill in the art at the time the invention was made to utilize the user input system of Levin to control media sources. Levin explicitly teaches of using the knob control device to control and adjust various media related characteristics (such as controlling the volume, tone, balance, treble and bass of a system). Although, Levin lacks explicit teachings that the knob control device is used to adjust media sources; it would have been obvious to one with ordinary skill in the art to recognize that the knob control device of Levin may be used in a variety of other fields, such as adjusting media

sources since the use of Levin's knob control device may be used to control other factors without interfering with the heart of the invention.

14. **As for claim 20**, LEVIN teaches of a pressure member (*not shown*) coupled to a plurality of switches (*not shown*), the pressure member having multiple sections, wherein each section of the multiple sections is associated with a switch of the plurality of switches and wherein the pressure member is positioned in relation to the plurality of switches such that when a force is applied by a user to one of the multiple sections, the pressure member transmits a resulting force to a switch associated with the one of the multiple sections thereby causing actuation of the switch associated with the one of the multiple sections (*Fig. 1, item 14, column 5, lines 13-16, where since the display 14 can have a touch panel this panel can function as a switch*).

15. **As for claim 21**, LEVIN teaches that a control (*Fig. 3a, item 18*) comprises a shaft (*Fig. 3a, item 50*), wherein the shaft (*Fig. 3a, item 50*) is mounted within a void of the pressure member (*Fig. 3a, item 18, the pressure member is treated as the knob since the knob of 18 is also responsive to pressure*) and secured by a fastener (*Fig. 3a, item 64*).

16. **As for claim 22**, LEVIN as modified above, inherently teaches that the system delays for a predetermined time, before executing one of a user media source selection, mode selection and media content item selection (*since it is inherent that the apparatus is not able to carry out the functions instantaneously, there must be a time delay*).

17. **As for claim 23**, LEVIN fails to teach that upon the occurrence of one of a user media source selections, mode selection, and media content item selection the system provides a sub-menu of options to the user.

18. Examiner takes official notice that it is well known in the art to provide a sub-menu of options to a user upon the occurrence of one of a user media source selections, mode selection, and media content item selection

19. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include a sub-menu of options with the knob input device of LEVIN so that user are able to use the knobs of LEVIN to control the various options available in a more organized fashion by allowing for sub-menus under the pre-existing options.

20. **As for claims 24, 25, 26**, LEVIN teaches that the display (*Fig. 1, item 14 and in Fig. 2*): is configured to provide a visual confirmation (*Fig. 1, item 30 and in Fig. 2, item 46*) of the media source selected {claim 24}; a color cue (*Fig. 1, item 30 and in Fig. 2, item 46*) based on a media source selected {claim 25} and a position indicator (*Fig. 1, item 30 and in Fig. 2, item 46*) depicting to the user, the relative position of a selected media content item within a browsable list of media content items (*Fig. 1, items 20, 22, 24 and in Fig. 2*), wherein the position indicator (*Fig. 1, item 30 and in Fig. 2, item 46*) is displayed in a radial format (*Fig. 1, item 22, 24 and in Fig. 2, item 44*).

21. As for claim 27, LEVIN teaches that the display (*Fig. 1, item 14*) is a touch screen and wherein the touch screen is configured to process a user input (*Fig. 1, item 14 and in column 5, lines 13-16*).

22. As for claims 28, 29, 30, 31, LEVIN teaches that-at least one of the first and second controls (*Fig. 1, item 18*) is configured to provide a visual confirmation (*Fig. 1, item 30 and in Fig. 2, item 45*) of a user input (*on the display*) {claim 28}; the visual confirmation is a text {claim 29} graphic {claim 30} color change {claim 31} in *Figs. 1-2 and in column 6, lines 5-15; column 6, lines 31-36*.

23. As for claims 36, 37, LEVIN fails to teach that the system is configured to provide an audible confirmation of the media source selected is a synthetic voice.

24. Examiner takes official notice that it is well known in the art to include an audible confirmation in a form of a synthetic voice.

25. It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine an audible confirmation in a form of a synthetic voice with the apparatus of LEVIN (which already utilizing audio sensors and actuators, see column 13, lines 50-54) in order to provide the user with a safer confirmation of the selected mode. LEVIN mentioned that the apparatus can be utilized in a vehicles in which case, the visual confirmation that LEVIN teaches may not be the safest options for user who are driving.

26. As for claim 38, LEVIN teaches of a second control (*Fig. 1, item 18*) is positioned from of the display (*Fig. 1, item 14*) and wherein the second control (*Fig. 1, item 18*) accepts

actuation of the second degree of freedom (*push and rotate, column 8, lines 5-10*) by the user, as a user input.

27. Claims 32-35, 39-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over LEVIN et al. (US Patent No: 6,154,201) in view of JAEGER et al. (US Patent No: 5,982,355).

28. **As for independent claim 39**, LEVIN teaches of a system (*Fig. 1, item 10*) for accepting user input, comprising:

29. (a) at least one switch (*see column 5, lines 13-18 where it is stated that the display can include a touch sensitive surface, in which case this will constitute as a switch*);

30. (b) a display (*Fig. 1, item 14*), wherein the display (*Fig. 1, item 14*) depicts menu options including:

31. options (*Fig. 2, where the source consists of one of items 46-51, column 7, lines 32-35*) and

32. control options (*Fig. 1, item 22 and in Fig. 2*), wherein the control options (*Fig. 1, item 22 and in Fig. 2*) are displayed on the display (*Fig. 1, item 14*) near the switch

33. (c) a pressure member (*column 5, lines 13-18*) disposed over the display (*Fig. 1, item 14*), the pressure member (*column 5, lines 13-18*) being configured to accept a force exerted by a user within a section of the pressure member (*column 5, lines 13-18*);

34. the pressure member (*column 5, lines 13-18*) further coupled to the at least one switch (*column 5, lines 13-18*) such that a resulting force transmitted by the pressure member in response to a user applied force causes a switch actuation (*column 5, lines 13-18*);

35. (d) a first control (*Fig. 1, first knob of items 18*) configured to make a selection based on the options (*Fig. 2, where the source consists of one of items 46-51, column 7, lines 32-35*);

36. (e) a second control (*Fig. 1, second knob of items 18*) that is different from the first control (*Fig. 1, first knob of items 18*) and has two degrees of freedom (*push and rotate as explained in column 8, lines 5-10*), the second control (*Fig. 1, second knob of items 18*) configured to choose a mode (*Fig. 2, selected value as shown from items 42, column 8, lines 5-9*) from a set of modes (*Fig. 2, range of values listed as shown from items 42, column 8, lines 5-9*) associated with the selection based on the options (*Fig. 2, where the source consists of one of items 46-51, column 7, lines 32-35*) in response to an actuation of the first degree of freedom (*push to select icon as describe in column 7, lines 30-35; column 8, lines 5-10*) of the second control (*Fig. 1, second knob of items 18*) by the user, wherein actuation of the second degree of freedom (*rotate to select desired value as described in column 8, lines 5-10*) by the user identifies a content item selection (*Fig. 2, value selected through items 46*)..

37. Levin fails to teach that at least a portion of the at least one control being optically transparent; and that the controllers are able to select a media source.

38. JAEGER teaches that at least one control (*Fig. 34, item 231*) being optically transparent.

39. It would have been obvious to one with ordinary skill in the art at the time the invention was made to have at least a one control be optically transparent for users to display

the desired image at the area of the display that is directly behind the switch (*see JAEGER: column 20, lines 9-13*).

40. Examiner takes official notice that it is well known in the art to utilize the user input system of Levin to control media sources.

41. It would have been obvious to one with ordinary skill in the art at the time the invention was made to utilize the user input system of Levin to control media sources. Levin explicitly teaches of using the knob control device to control and adjust various media related characteristics (such as controlling the volume, tone, balance, treble and bass of a system). Although, Levin lacks explicit teachings that the knob control device is used to adjust media sources; it would have been obvious to one with ordinary skill in the art to recognize that the knob control device of Levin may be used in a variety of other fields, such as adjusting media sources since the use of Levin's knob control device may be used to control other factors without interfering with the heart of the invention.

42. **As for claim independent 46**, LEVIN teaches of a plurality of switches (Fig. 1, items 18);

43. a display (Fig. 1, item 14) for displaying a source, a mode and a content item (Fig. 2);

44. a pressure member coupled to at least one of the plurality of switches (Fig. 1, items 18), the pressure member being configured to accept a force exerted by a user within a section of the pressure member, and

45. a first control (*Fig. 1, first knob of items 18*) configured to select a source (*Fig. 2, where the source consists of one of items 46-51, column 7, lines 32-35*) in response to an actuation of the first control (*Fig. 1, first knob of items 18*) by a user;

46. a second control (*Fig. 1, second knob of items 18*), that is different from the first control (*Fig. 1, first knob of items 18*) and has two degrees of freedom (*push and rotate as explained in column 8, lines 5-10*) the second control (*Fig. 1, second knob of items 18*) configured to choose a mode (*Fig. 2, selected value as shown from items 42, column 8, lines 5-9*) from a set of modes (*Fig. 2, range of values listed as shown from items 42, column 8, lines 5-9*) for the selected source (*Fig. 2, where the source consists of one of items 46-51, column 7, lines 32-35*) in response to an actuation of the first degree of freedom (*push to select icon as describe in column 7, lines 30-35; column 8, lines 5-10*) of the second control (*Fig. 1, second knob of items 18*) by the user, wherein actuation of the second degree of freedom (*rotate to select desired value as described in column 8, lines 5-10*) by the user identifies (*where the selected content item or mode or desired value is shown on the display, Fig. 2, column 7, lines 27-30*) a content item selection (*Fig. 2, value selected through items 46*).

47. LEVIN fails to teach that the pressure member disposed over the display wherein at least a portion of the display is visible through the pressure member and that the controllers are able to select a media source.

48. Examiner takes official notice that it is well known in the art to utilize the user input system of Levin to control media sources.

49. It would have been obvious to one with ordinary skill in the art at the time the invention was made to utilize the user input system of Levin to control media sources. Levin explicitly teaches of using the knob control device to control and adjust various media related characteristics (such as controlling the volume, tone, balance, treble and bass of a system). Although, Levin lacks explicit teachings that the knob control device is used to adjust media sources; it would have been obvious to one with ordinary skill in the art to recognize that the knob control device of Levin may be used in a variety of other fields, such as adjusting media sources since the use of Levin's knob control device may be used to control other factors without interfering with the heart of the invention.

50. JAEGER teaches that at least a portion of the control (*Fig. 34, item 231*) is optically transparent such that at least a portion of the display is (*Fig. 34, item 232*) visible through the at least one control in *column 20, lines 63-65*.

51. It would have been obvious to one with ordinary skill in the art at the time the invention was made to have at least a portion of the display be visible through the pressure member as taught by JAEGER with the display of LEVIN in order for users to display the desired image at the area of the display that is directly behind the switch (*see JAEGER: column 20, lines 9-13*).

52. **As for claim 32**, Levin fails to teach that at least a portion of the at least one of the first and second controls is optically transparent, wherein the at least one of the first and second controls is positioned over the display and wherein information display by the display is visible through the at least one of the first and second controls.

53. Jaeger teaches that at least a portion of the at least one of the first and second controls (Fig. 34, item 231) is optically transparent, wherein the at least one of the first and second controls (Id.) is positioned over the display (Fig. 34, item 232) and wherein information display by the display (Id.) is visible through the at least one of the first and second controls (Fig. 34, item 231, column 20, lines 63-65).

54. It would have been obvious to one with ordinary skill in the art at the time the invention was made to have at least a portion of the display be visible through the pressure member as taught by JAEGER with the display of LEVIN in order for users to display the desired image at the area of the display that is directly behind the switch (*see JAEGER: column 20, lines 9-13*).

55. **As for claims 33, 34, 35**, LEVIN teaches that-at least one of the first and second controls (*Fig. 1, item 18*) is configured to provide a visual confirmation (*Fig. 1, item 30 and in Fig. 2, item 45*) of a user input (*on the display*); the visual confirmation is a text {claim 33} graphic {claim 34} color change {claim 35} in *Figs. 1-2 and in column 6, lines 5-15; column 6, lines 31-36*.

56. **As for claim 40**, Levin as modified above in claim 39 teaches that at least one control (Fig. 1, touch-sensitive panel of item 14) is positioned over the display (Fig. 1, item 14) and wherein information displayed by the display (Id.) is visible through the at least one control (Fig. 1, touch-sensitive panel of item 14, column 5, lines 12-16).

57. **As for claims 41, 42, 43**, LEVIN teaches that the display displays a color to provide a user feedback {claim 41}; at least one control display a color to provide user feedback {claim 42}; that at least one control displays an symbolic representation of a selected one of the media content source, mode and media content item {claim 43} (*see Figs. 1-2 and in column 6, lines 5-15; column 6, lines 31-36 and Fig. 1, item 30 and in Fig. 2, item 45*).

58. **As for claim 44**, LEVIN as modified above, teaches that the first control (*Fig. 1, item 18*) has two degrees of freedom (*push and rotate, column 6, lines 41-48*) in actuation, and wherein actuation of the first degree of freedom (*push*) is associated with selection of a media source, and the second degree (*rotate*) of freedom is associated with control of system volume (*column 6, lines 41-48*).

59. **As for claim 45**, LEVIN as modified above, teaches that the display is also configured to display one of the media options, mode, and media content item (*Fig. 2*).

Conclusion

60. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy Pham whose telephone number is (571) 272-7773.

The examiner can normally be reached on 8:00-5:30 (Mon-Fri).

61. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

62. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TP
14 March 2008

Tammy Pham
/Tammy Pham/
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